



Name _____ Date _____

Practice: For use after Lesson 3.5, Algebra 2 with Trigonometry

Inverse Functions

Find the inverse of each relation or function.

1. $\{(1, 5), (3, 7)\}$ _____ 2. $y = x + 1$ _____

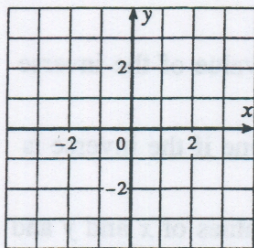
Find the inverse of each function and state its domain and range. Use a mapping diagram to determine if each inverse is also a function.

3. $\{(2, -2), (3, -3), (4, -4), (5, -5)\}$

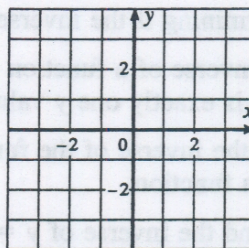
4. $\{(-1, 4), (5, 6), (3, 4), (-2, 7)\}$

Find the inverse of each function. Graph f , f^{-1} , and $y = x$ on the same coordinate plane.

5. $y = x + 2$



6. $y = 3x - 3$



Find the inverse of each relation or function.

7. $y = 3x + 2$, $x = 1, 2, 3$ _____

8. $y = -2x + 1$, $x = 0, 1, 2$ _____

Application

9. **Geometry** The formula for the area of a circle is $y = \pi r^2$. Find the inverse of this function and determine if it is also a function.

MIXED PRACTICE

Evaluate $f[g(x)]$ and $g[f(x)]$ for $x = 3, -2, 0, k$.

10. $f(x) = x^2$, $g(x) = 2x - 2$ _____

11. $f(x) = -4x^2$, $g(x) = x + 1$ _____